

ITEM #6

# **REPORT OF ACTIVITIES OF THE DEPARTMENT OF WATER RESOURCES**

**by**

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The Resources Agency  
State of California\***

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\*Presented before the Central Valley Flood Protection Board October 17, 2008

## **STATEWIDE FLOOD PLANNING OFFICE (SFPO)**

### **Implementation Schedule for CVFPP**

SFPO staff will provide a proposed Implementation Schedule for preparation of the Flood Control System Status Report for the State Plan of Flood Control to the Board for consideration at the November 21, 2008 board meeting. Ken Kirby, FloodSAFE Planning Portfolio Manager, will brief the Board on this issue at today's Board meeting as part of the DWR Report to the Board.

### **Flood Planning Liaison**

SFPO staff has participated in the following recent coordination meetings:

- August 27 - Participated in the initial meeting of the Lower Yolo Bypass Planning Forum.
- September 24 - At the request of the San Joaquin County Technical Advisory Committee, made a presentation and discussed their participation in the Central Valley Flood Protection Plan.
- September 24 - Attended the second meeting of the Lower Yolo Bypass Planning Forum and committed to continued participation in the forum.
- October 6 - Met with the California Central Valley Flood Control Association (CCVFCA) Action Workgroup to discuss the Central Valley Flood Management Planning Draft Scoping Document and how the CCVFCA can help develop the Central Valley Flood Protection Plan.

### **Consultant Services Contract**

The A&E services contract (maximum of \$35 million over 5 years) was awarded to MWH Americas (Montgomery-Watson-Harza) on July 31, 2008. The following Tasks Orders (TO's) have been issued or are in progress:

- TO 1 Senior MWH project management and coordination activities (issued)
- TO 2 Coordination and support of ongoing hydrologic and hydraulic activities and preparation of a project scoping document (PSD) and project management plan (PMP) for the CVFPP (issued)
- TO 3 Preparation of an initial Flood Control System Status Report for the State Plan of Flood Control (issued)
- TO 4 Initial public outreach activities and development of a stakeholder involvement program (preparation in progress)
- TO 5 Provide assistance for development of proposed amendments to the California Building Codes Standards (preparation in progress)

## **MAINTENANCE SUPPORT BRANCH**

### **Garmire Road Bridge Replacement Project (Tisdale Weir & Bypass)**

The contractor, MCM Construction, has completed the superstructure for the new Garmire Road Bridge. The remaining work for the new bridge consists of paving the bridge approaches and placing revetment at the abutments. Settlement of the abutments is being monitored so that the paving can be performed as soon as settlement ceases. The old Garmire Road Bridge over the Tisdale Weir is scheduled to be demolished and removed from the site by mid-October. Even if paving has not been completed over the new bridge, the new bridge will be accessible when the old bridge is demolished. There are currently ongoing discussions with the Fish and Wildlife Service regarding work at the south abutment of the old bridge since the project is now extending into the giant garter snake inactive season and that abutment is within a sensitive zone. If work at the south abutment cannot continue, the south abutment will be removed next year per plan.

### **Maintenance Area 9 Pipeline Abandonment**

The Central Valley Flood Protection Board requested DWR during their October 19<sup>th</sup>, 2007 meeting to abandon a pipeline owned by M&H Realty Partners by way of Board Order 07-01. This order was issued in response to the owner not complying with their inspection or maintenance requirements in accordance with their permit conditions. During late August DWR contracted with CalSierra Construction, Inc. to perform a video inspection of the pipeline. Approximately 152 feet of pipeline was inspected and no cracks were evident. A grout plug was placed in last 60 feet of the waterside end of the pipeline. The right of entry permit expired on September 30 and the request to extend the permit to October 31 has been issued. The property owner has informed DWR verbally that the permit has been signed and is in the mail. Once that permit is received, the Sacramento maintenance yard staff will order a truck of grout and complete the abandonment of the pipeline in accordance with Section 124(c) of Division 1, Title 23 of California Code of Regulations. This work is expected to take less than one day and should occur by mid-October.

## **Colusa SRA Mitigation Site**

The construction contract was awarded 9/30/08 to River Partners for the amount of \$895,514. The notice to proceed is expected to be issued in mid-October. Construction activities scheduled for 2008 include the installation of underground irrigation piping and the plantings within the Tisdale Bypass required to fulfill mitigation obligations from the Tisdale Bypass Sediment Removal Project. This work will be completed in November 2008. Construction will resume in Spring 2009 on the irrigation pump station, electrical power and controls, and the initial planting of 137 acres at the Colusa site. Additional tree cuttings will be planted at Colusa between Fall 2009 and Spring 2010. The contract will terminate in November 2011 after the mitigation site is established and all success criteria requirements are met.

## **Levee Road Repairs**

This project restores the gravel surface on 44 miles of State-maintained levee crown roads at an estimated cost of \$2.3 million. The first phase was completed on August 29, 2008, representing 23% of the total planned work. Construction started on the remaining portion on October 1, 2008 in accordance with U.S. Fish and Wildlife conservation measures for giant garter snake (GGS). These measures include on-site monitoring for GGS activity during active construction. The remaining levee crown roads to be restored include portions of Willow Slough, Yolo Bypass, Putah Creek, and the Sutter Bypass. All work is scheduled to be completed by November 15, 2008.

## **FLOOD OPERATIONS BRANCH**

### **Decision Support Section**

Modernization of the Division of Flood Management's web portal: On Monday, September 15, 2008, section staff launched the Best Available Maps as part of the Flood Management portal. These advisory floodplain maps for Sacramento-San Joaquin Valley cities and counties are required by Senate Bill 5.

Modernization of the Flood Operations Center Information System (FOCIS): FOCIS is the State-Federal Flood Operations Center (FOC)'s Information System used for State-mandated tracking of the Department's response to water-related incidents and emergencies. A review of the updated FOCIS is scheduled for the week of October 20th. The system is functional but can not to be fully utilized. Staff is working to finalize the user interface and system features before providing a release for testing.

Modernization of the Flood Operations Center Geographic Information System (FOC GIS): FOC GIS is part of the decision support tools used by the Flood Operations Center to respond to water-related incidents and emergencies. Staff developed a manual for GIS emergency response standard operating procedures and has scheduled a FOC training session in late October to ramp up for flood season. Additionally, staff developed State and county index maps for the Best Available Maps series incorporated into the Flood Management portal.

Modernization of the Flood Operations Center IT Assets: The first use of the in house web-casting system is scheduled for Wednesday, October 8, 2008, to allow internal and external partners to view a functional exercise of the Forecast-Coordinated Operations (FCO) system.

### **Emergency Response and Security Section**

Delta Emergency Operations Plan (EOP): Planning for the Delta EOP tabletop exercise is currently underway. A seminar that will present the new EOP for exercise participants is currently scheduled for November 5, 2008. The exercise itself is currently scheduled for December 10, 2008. Staff has been coordinating with Governor's Office of Emergency Services, and other agencies to determine their level of participation in the exercise.

Flood Fight Classes – Training: Rick Burnett, and other Flood Fight Specialists, have started conducting classes for Flood Fight Methods. Classes are being booked through January 2009.

### **Flood System Analysis Section**

Vulnerability Assessment: The Flood System Analysis Section is continuing to work closely with the Flood Project Integrity and Inspection Branch. Staff have been doing background research to identify all potential data and sources of information and have been working on the criteria to rate the data. A proposal of the projects goals/objectives/products is being drafted for approval.

Static Inundation Maps: The Section is working with the Decision Support group to make local/county inundation map assets more accessible to the Hydrology and Flood Operations Office by obtaining existing local/county map assets for use in the integrated flood operations interface. A coordination meeting between the groups was held and next steps were outlined.

Joint State-Federal Operations Center Section, Flood Operations Center (FOC):  
Inyo County Mud/Debris Flows: The FOC continues to facilitate and coordinate conference calls and weekly updates with Cal OES and local, state and federal agencies assisting with the recovery effort. The next conference call is scheduled for Wednesday, October 22<sup>nd</sup>, 2008 at 1330 hours.

Pre-Season Meetings: FOC/DFM staff is working with the Governor's Office of Emergency Services, U.S. Army Corps of Engineers, National Weather Service, and other State and federal representatives to hold pre-season meetings at the following Northern California locations:

- Remaining meetings are tentatively scheduled for the following dates, times and locations:
  - October 8 - Red Bluff
  - October 9 - Yuba City
  - October 15 - Sacramento
  - October 16 - Stockton
  - December 4 - Eureka
  - TBD - Monterey

Directory of Flood Officials: The 2008 Directory of Flood Officials is complete and at the printers. Hard copies are expected to be available by the end of October. Digital copies are available upon request.

AB-156: Staff is continuing work on generating GIS maps that will identify communities with 1000+ people protected by levees.

Internal Pre-Season Training: The FOC staff and Cindy Matthews from the National Weather Service have been conducting training sessions in the FOC to prepare Flood Operations Branch staff with the daily routine tasks of the office and prepare staff for flood emergency events.

Emergency Action Plan: FOC staff continues to attend and participate in local reservoir and utility district Emergency Action Plan (EAP) face to face meetings and tabletop exercises. To date, FOC staff have attended the following EAP functions:

- Monticello Dam EAP Tabletop Exercise – April 12<sup>th</sup>, 2008
- El Dorado Hydroelectric EAP exercise – May 7<sup>th</sup>, 2008
- Merced Irrigation District EAP Exercise – May 21<sup>st</sup>, 2008
- EBMUD EAP Tabletop – August 13<sup>th</sup>, 2008

## **Local Emergency Preparedness and Response Section**

Staff is working on an In-kind services agreement (Agreement) with the U.S. Army Corps of Engineers (Corps). The Agreement will allow DWR access to the Corps mapping of Delta specific areas. The Corps will provide the maps to DWR and we will post on our website and maintain them.

Staff is working with David Ford Consulting Engineer's group to identify 3 cities for a pilot project and develop the pilot community selection criteria. Three cities have been selected for this study to develop/ enhance flood response and recovery plans. The proposed cities are: Yuba City, Arcata and Rancho Cucamonga.

Hydrology and Flood Operations Office (HAFOO) staff and management along with URS and its sub-consultants have completed a draft version of the interim Delta Emergency Preparedness and Response Plan (EPRP) for internal review. This document is currently being reviewed by HAFOO management and will be released to the newly formed Delta working Group in the coming months.

Staff is working with GEI Consulting to review existing emergency operations plans used by other agencies. The information will be used in the next phase of the program to enhance the Department's emergency operations preparedness and response operation.

## **FLOODPLAIN MANAGEMENT BRANCH**

### **Senate Bill 5 Building Codes**

The Building Codes Project Technical Advisory Committee meets on October 15 to further discuss the six building code "provisions under consideration" and preliminary building code schematic diagrams. At the next TAC Meeting in early November, the initial code package for the Building Standards Commission will be formulated. (At the August 28 kickoff meeting, the TAC discussed the legislative requirements, code adoption process and six building code provisions under consideration.) Meeting notes from the first TAC meeting are available and the second (October) TAC meeting notes will be forthcoming. Dan Fua is representing the Central Valley Flood Protection Board.

## **STATEWIDE GRANTS BRANCH**

### **Assembly Bill (AB) 1147 Draft Regulations**

Department staff revised the proposed AB 1147 regulations in response to public comments received during a 45-day period that closed with a public hearing on July 29, 2008. A 15 day public comment period on the revisions to the regulations ends Oct. 23. The regulations apply to federal projects authorized by the State after January 1, 2002 and affect the State cost share of those projects.

## **FLOOD PROJECT MODIFICATIONS & PERMITS BRANCH**

### **Early Implementation Program (EIP)**

Project funding for the four EIP projects currently approved are:

- Three Rivers Levee Improvement Authority: Feather River Levee Improvement Project – Total cost: \$191.4 million, estimated maximum State cost share: \$138.5 million. State share paid to date: \$55 million.
- Sacramento Area Flood Control Agency: Natomas Levee Improvement Program (NLIP) Early Start Program – Total NLIP cost \$223.5 million; total cost of Natomas Cross Canal South Levee element of NLIP: \$73.4 million; estimated maximum State cost share: \$49 million. State share paid to date \$4.74 million.
- Reclamation District No. 2103: Bear River North Levee Rehabilitation Project – Total cost: \$14.7 million, estimated maximum State cost share: \$7.35 million. State share paid to date \$4.68 million.
- Levee District No. 1 of Sutter County: Lower Feather River Setback Levee at Star Bend – Total cost: \$20.78 million, estimated maximum State cost share: \$16.33 million. State share paid to date: none

### **Three Rivers Levee Improvement Authority (TRLIA) –**

TRLIA proposed leasing floodplain land to agriculture interests on the waterside property between the new Segment 2 setback levee and the Feather River. DWR notified TRLIA that the funding agreement does not allow agriculture leases longer than five years. DWR is preparing a letter formally responding to TRLIA's request and identified language in their Funding Agreement pertaining to restrictions on agriculture leases. The letter is drafted and will be sent next week.



DOE is continuing to review technical data submitted with TRLIA's request for approximately \$10.2 million of State cost share funding for Segment 1. A 600-foot long longitudinal crack developed along the landside levee slope in Segment 1, which is a concern for the upcoming flood season. On October 3, 2008, it was decided that TRLIA's contractor would cover the crack and monitor it during this flood season. TRLIA is to develop a work plan and an emergency flood fight plan. DOE and TRLIA's consultants will continue to evaluate the crack movements until they have identified the cause. At that time a permanent repair will be implemented.

TRLIA has submitted a resolution to the permeability issue to the COE and is waiting on their official concurrence. An email has been received from the local geotechnical office of the COE recommending its acceptance providing additional piezometers are installed for monitoring the section in question. TRLIA is still waiting on the official response.

**Sacramento Area Flood Control Agency (SAFCA)** – No significant changes.

**Reclamation District 2103 (RD 2103)** – RD 2103 has requested an increase in State funding for this project from \$14.7 to \$18.2 million to cover increase in costs for work identified in the Funding Agreement. An amendment to the Funding Agreement will be needed; however, as the additional funding will be coming from the recently approved Fiscal Year 08/09 Budget, the amendment will not be finalized until the EIP Guidelines are finalized, most likely in November.

**Levee District No. 1 of Sutter County (LD1)** – No significant changes.

**West Sacramento Area Flood Control Agency (WSAFCA)** – WSAFCA will begin work on a small segment of levee near the I Street bridge using their own funds. They have submitted a letter requesting that credit for this work be considered for future EIP work. Program staff is meeting with WSAFCA to introduce them to the Early Implementation Program requirements and for State cost-share funding for future phases of levee construction.

**Reclamation District 17 (RD 17)** – RD 17 has submitted their request for EIP credit along with CEQA documents, plans, specifications, and report. The technical information has been sent to DOE for review and CEQA documents to DFM Environmental. DWR is reviewing their request and a letter of acknowledgment has been sent.

### **Local Levee Urgent Repair Program** **Local Levee Evaluation Program**

Staff continues to review the submitted proposals and began the process for awarding a \$5-million grant to Orange County for urgent repairs needed on San Juan Creek near San Juan Capistrano.

The Branch is surveying local agencies to determine interest for a second funding solicitation of the LOLE program. Staff will explore changes to the program guidelines to meet the needs of potential funding recipients in order to maximize participation. Based on input received from the survey, we plan to revise the LOLE Guidelines and go forward with a new solicitation by the end of the calendar year. The goal is to make the program more responsive to local agency needs and maximize use of remaining funds.

### **LEEVE REPAIRS BRANCH**

#### **Sacramento River Bank Protection Project (SRBPP)**

Construction on eight sites (Sacramento River 49.7L, 52.3L, 53.5R and 177.8R; American River 0.3L and 2.8L, Cache Slough 21.8R, and Steamboat Slough 16.6R) started in September and repairs are scheduled for completion by October 30, 2008.

The Corps and DWR are working together to select sites for next year's repairs. Out of the remaining authorized 15,650 lineal feet left in this program, about 9,000 lineal feet of bank protection is planned for 2009. DWR has received a special request from the Sacramento Area Flood Control Agency for repairs to three critical erosion sites in Natomas. A total of 36 sites are under evaluation. However, due to property rights and encroachment issues, limited repairs totaling only about 9,000 lineal feet may be possible.

#### **San Joaquin River Flood Protection Project**

Three critical sites; San Joaquin River Mile 42.3R, Paradise Cut Levee Mile 3.8L and Mormon Slough Levee Mile 11.8R, are under construction. The Paradise Cut site requires off-site mitigation for Brush Rabbit and negotiations with U.S. Fish and Wildlife Service are continuing to provide this mitigation.

DWR is continuing with priority ranking of sites for next year's construction based on criticality of damage and justification for repairs on the basis of Benefit Cost Analysis.

## **2006 Public Law (PL) 84-99 Rehabilitation Assistance Program**

This program includes repairs to 22 Order 2 and 139 Orders 3, 4 and 5 remaining 2006 flood damaged sites. Construction this year is moving forward at a fast pace. Repair work started on August 15, 2008 and to date 95 sites have been repaired. Repairs to 17 sites in RD 150 are being postponed to next year as RD has not kept up with its maintenance work and is ineligible under PL84-99 Program. If RD 150 meets maintenance requirements by spring 2009, the corps will repair these sites next year.

A three mile long slurry wall construction is in progress on the Chowchilla Bypass Left Bank in the Lower San Joaquin Levee District and is scheduled for completion by October 30, 2008. In addition, work on seepage berms on three sites on the right bank is in progress. DWR is paying \$4.97 million out of a total of \$19.0 million being spent by the Corps to repair Lower San Joaquin District sites.

## **URBAN LEVEE EVALUATIONS BRANCH**

The Urban Levee Evaluations Branch was created to perform geotechnical levee evaluations on about 350 miles of urban levees. An urban levee is defined as protecting at least 10,000 people. The geotechnical levee evaluations will focus on the urban project levees in geographic areas of Reclamation District (RD) 17, RD 404, Natomas, West Sacramento, Marysville, Woodland, Davis, Stockton, MA9, American River, Sacramento, the Sutter Basin, and RD 784. This program is in the process of expanding to other areas within the Sacramento and San Joaquin Flood Control Projects with the Bond funding.

The purpose of these evaluations is to assist in developing a levee certification program based on geotechnical data, provide consistent formats for data (and associated data exchange), and provide an evaluation of the levee system based on geotechnical data. This evaluation will be conducted with the goal of providing 200-year level of protection in urban areas and the design profile level of protection in rural areas using the U.S. Army Corps of Engineers (Corps) underseepage criteria.

## **General**

1. The Levee Evaluations Branch continues to work closely with RD 17, Natomas (SAFCA and RD 1000), Three Rivers, West Sacramento, and others within the Department and the Corps to review issues concerning early implementation projects.
2. Weekly coordination meetings with the Corps continue so that subsurface explorations plans are approved in advance of work and efforts are not duplicated.
3. The tenth Independent Consulting Board Meeting concerning levee evaluations was held in September, 2008. The next meeting is planned for December 2008.
4. Issues of strength for use in design and an erosion toolbox are being presented to working groups and will be finalized in November 2008. Because of need for closure on these issues, reports are being delayed so as to not have to repeat analysis efforts after these findings. This is being communicated to local stakeholders.

The work performed in September 2008 is broken into three geographic urban levee areas of North, Central, and South is as follows:

## **North Urban**

1. Sutter Basin: The Corps finished reviewing the Draft Phase 1 Geotechnical Evaluation Report (P1GER) and report will be finalized in October 2008. The Phase 1 Geotechnical Data Report (P1GDR) will be finalized and distributed to the local stakeholders in October 2008. Additional supplemental explorations that commenced on July 21, 2008 will continue through October 2008.
2. Marysville: The final P1GER was finalized and distributed to the local stakeholders. Work on the draft Supplemental Geotechnical Data Report (SGDR) is continuing and should be completed in October 2008.
3. RD784: The draft Supplemental Subsurface Investigation Work Plan was delivered by URS to DWR and is undergoing an internal QA/QC process and Corps review.

## **Central Urban**

1. West Sacramento: The draft SGDR for West Sacramento is underway and is expected to be delivered to DWR in October 2008.
2. Sacramento River: The final Technical Review Memorandum (TRM) for the east bank levees of Sacramento River (between and American River and Freeport) was delivered to DWR in September 2008. The draft P1GER for the east bank levees of Sacramento River is underway and expected to be delivered to DWR in October 2008.
3. NEMDC: The final P1GDR report for NEMDC-East levees is expected to be delivered to DWR in October 2008. The final P1GDR report for NEMDC-West levees is also expected to be delivered to DWR in October 2008. A draft P1GER for NEMDC-West levees is currently underway and will incorporate SAFCA's most current field investigations prior to its expected release to DWR in October 2008.
4. Natomas North, West, and South (NWS): The draft TRM for Natomas NWS, which encompasses previous studies completed on behalf of SAFCA, USACE, and DWR, was delivered to DWR in September 2008. This report is currently undergoing an internal DWR QA/QC process and Corps review.
5. American River: A draft SGDR for the American River levees is underway and is expected to be delivered to DWR in October 2008. The final TRM for the American River levees is expected to be delivered to DWR in October 2008.
6. Davis: The final Phase 1 GDR is complete. DWR will received the report in September 2008. Analysis of the field data collected from the subsurface exploration is underway for the draft P1GER.
7. Woodland: The final Technical Review Memorandum and Phase 1 subsurface investigation work plan were delivered to DWR. The draft P1GDR for Woodland will be submitted to DWR in October 2008. A draft document of the Cache Creek portion of the Woodland levees has been submitted to DWR for review. This report includes the fluvial geomorphic study and data collection of Cache Creek and its levees.

## **South Urban**

1. SJAFCA: The Draft P1GER for the Calaveras River Drainage was delivered to DWR in August 2008. This report is undergoing an internal DWR QA/QC process and USACE review.
2. SJAFCA: The Draft P1GER for the Bear Creek Drainage was delivered to DWR in September 2008. This report is undergoing an internal DWR QA/QC process and USACE review.
3. RD 404: The Final P1GDR for RD 404 was received by DWR and released to local stakeholders in September 2008. The Draft P1GER for RD 404 was delivered to DWR in September 2008. This report is undergoing DWR QA/QC process and USACE review.
4. RD 17: Supplemental field explorations and laboratory testing were completed in RD 17. The Draft SGDR for RD 17 is currently being prepared.
5. Greater Stockton Area Urban Non-Project Levees: In early October 2008, DWR will meet with local stakeholders and SJAFCA in Stockton for the second coordination meeting and briefing of planned activities. DWR will inform the local stakeholders and SJAFCA of the plan to begin subsurface investigations along selected reaches of the urban non-project levees in November 2008.

## **NON-URBAN LEVEE EVALUATIONS BRANCH**

The Non-urban Levee Evaluations Branch was created to perform geotechnical levee evaluations on about 1,250 miles of non-urban State/Federal project levees. A non-urban levee is defined as protecting 10,000 or less people. The geotechnical levee evaluations will focus on the non-urban State/Federal project levees in the Sacramento River and the San Joaquin River flood control systems. This project is in the process of expanding to include the appurtenant non-project levees; these are non-project levees that provide protection to the same levee systems that non-urban project levees do.

The purpose of these evaluations is to support the Central Valley Flood Protection Plan (CVFPP) and other flood management related programs by determining if these levees meet defined geotechnical criteria and, if appropriate, identify remedial measure(s) to meet those criteria. This evaluation will be conducted with the goal of providing the design profile level of protection in non-urban areas using the DWR and the Corps levee design criteria.

**Activities in September 2008:**

1. The non-urban Levee Evaluation project purpose and needs was developed.
2. Began development of the Project Scoping Document.
3. Project management plan development continued.
4. Reconnaissance-level geomorphic studies have begun.
5. Data collection needs for the levee evaluation, Central Valley Floodplain Evaluation and Delineation (CVFED) and Central Valley Flood Protection Plan (CVFPP) was discussed among key staff to minimize duplicate efforts.
6. An outreach plan, covering all three projects, was developed and will be implemented in October prior to consultants contacting the local agencies requesting data.